

**What is claimed is:**

1. A method of integrating vocal input recognition and handwriting input recognition comprising the steps of:
  - (A) receiving a syllabic vocal input signal of a object alphanumeric symbol;
  - (B) recognizing the input vocal signal and generating an alphanumeric symbol array having a plurality of candidate alphanumeric symbols corresponding to the object alphanumeric symbol ;
  - (C) receiving an input handwriting signal describing the feature of the object alphanumeric symbol;
  - (D) extracting the most coincidental candidate alphanumeric symbol from the alphanumeric symbol array corresponding to the feature.
2. The method of claim 1 wherein the input handwriting signal in step (D) is a substructure of the object alphanumeric symbol.
3. The method of claim 2 wherein the substructure of the object alphanumeric symbol is the radical of the object alphanumeric symbol.
4. The method of claim 1 , between step (B) and step (C) , further comprising step (E) listing the most frequently utilized candidate alphanumeric symbols of the alphanumeric symbol array.
5. The method of claim 4 , after step (D) , further comprising step (F) listing the most coincidental candidate alphanumeric symbol

of the alphanumeric symbol array to replace the most frequently utilized candidate alphanumeric symbols.

6. A method of integrating vocal input recognition and handwriting input recognition comprising the steps of:

- receiving a first input of an object alphanumeric symbol;

- receiving the first input and generating an alphanumeric symbol array having a plurality of candidate alphanumeric symbols corresponding to the first input;

- detecting if there exists a second input describing the object alphanumeric symbol during a predetermined time span;

- If there exists the second input, then extracts the corresponding candidate alphanumeric symbol from the alphanumeric symbol array coinciding with the second input, wherein the first input is whether a vocal input or a handwriting input, the second input is whether the vocal input or the handwriting input.

7. The method of claim 6 further comprising a step receiving the first input and then converting the first input into a first signal; a step receiving the second input and then converting the second input into a second signal.
8. The method of claim 6 further comprising a step extracting the feature of the first input from the first signal; and a step extracting the feature of the second input from the second signal.
9. The method of claim 6 further comprises a step extracting the

most frequently utilized candidate alphanumeric symbol from the alphanumeric symbol array where the second input does not exist.

10. The method of claim 9 further comprises a step representing the most frequently utilized candidate alphanumeric symbol.
11. The method of claim 6 further comprises a step representing a candidate alphanumeric symbol in accordance with the alphanumeric symbol.
12. A recognition system integrating vocal and handwriting input recognition comprising:
  - a vocal input device for receiving a vocal input having an object alphanumeric symbol and converting the vocal input into a first signal;
  - a handwriting input device for receiving a handwriting input describing the feature of the object alphanumeric symbol and convert the handwriting input into a second input;
  - a vocal similarity estimator for generating an alphanumeric symbol array having a plurality of candidate alphanumeric symbols corresponding to the object alphanumeric symbol according to the first signal;
  - a handwriting similarity estimator for extracting the most coincidental candidate alphanumeric symbol from the alphanumeric symbol array according to the second signal.

13. The recognition system of claim 12 wherein the feature of the object alphanumeric symbol is a radical of the object alphanumeric symbol.
14. The recognition system of claim 12 further comprising a vocal database storing a plurality of vocal patterns, the vocal patterns are provided for the vocal similarity estimator to map with the first signal and generating the alphanumeric symbol array.
15. The recognition system of claim 12 further comprises a vocal feature extractor for extracting the characteristic of the vocal input from the first signal and transmitting the characteristic to the vocal similarity estimator.
16. The recognition system of claim 12 further comprising a handwriting database storing a plurality of handwriting patterns, the handwriting patterns are provided for the handwriting similarity estimator to map with the second signal and extract the candidate alphanumeric symbol most coinciding with the object alphanumeric symbol.
17. A recognition system comprising:
  - a first input device for receiving a vocal input having a alphanumeric symbol and converting the vocal input into a first signal;
  - a second input device for receiving a handwriting input describing the feature of the object alphanumeric symbol and converting the handwriting input into a second signal;

a first similarity estimator for generating an alphanumeric symbol array having a plurality of candidate alphanumeric symbols corresponding to the object alphanumeric symbol by the first signal;

a second similarity estimator for extracting the candidate alphanumeric symbol that most coinciding with the object alphanumeric symbol from the alphanumeric symbol array by the second signal.

18. The recognition system of claim 17 further comprising a vocal database storing a plurality of vocal patterns , and a handwriting database storing a plurality of handwriting patterns ; one of the above database is provided for the first similarity estimator to map with the first signal and generate the alphanumeric symbol array , the other database is provided for the second similarity estimator to map with the second signal and extract the candidate alphanumeric symbol most coinciding with the object alphanumeric symbol.
19. The recognition system of claim 17 further comprises a first feature extractor and a second feature extractor, the first feature extractor extracting the feature of the first input from the first signal and transmitting the feature of the first input to the first similarity estimator, the second feature extractor extracting the feature of the second input from the second signal and transmitting the feature of the second input to the second

similarity estimator.

20. A computer accessible recording medium comprises a plurality of programming codes for executing the following step:

receiving a syllabic input vocal signal of an object alphanumeric symbol;

recognizing the input vocal signal and generating a alphanumeric symbol array having a plurality of candidate alphanumeric symbols corresponding to the object alphanumeric symbol ;

receiving an input handwriting signal describing the feature of the object alphanumeric symbol;

extracting the most coincidental candidate alphanumeric symbol from the alphanumeric symbol array corresponding to the feature.